

REMARKS

Claims 1, 3-5, 7-11, 34, 37, 44 and 48-64 are currently pending in the subject application, and are presently under consideration. Claims 1, 3-5, 7-11, 34, 37, 44 and 48-64 are rejected. Favorable reconsideration of the application is requested in view of the comments herein.

I. Rejection of Claims 1 and 3-5 Double Patenting

Claims 1 and 3-5 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 7,146,144 B2 to Robinson, et al. ("Robinson") in view of U.S. Publication No. 2005/0201481 A1 to Calderbank, et al. ("Calderbank") and U. S. Patent No. 5,933,062 to Kommrusch ("Kommrusch"). An appropriate terminal disclaimer has been provided with the attached application to overcome the rejection. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection.

II. Rejection of Claim 7 Double Patenting

Claim 7 stands rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of Robinson in view of Calderbank and Kommrusch, and further in view of U.S. Patent No. 6,291,924 B1 to Lau, et al. ("Lau"). Applicant's representative respectfully submits that the Examiner inadvertently directed this rejection to claim 8, but Applicant's representative believes from the cited claim language that the rejection was intended to be directed to claim 7. An appropriate terminal disclaimer has been provided with the attached application to overcome the rejection. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection.

III. Rejection of Claim 8 Double Patenting

Claim 8 stands rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of Robinson in view of Calderbank and Kommrusch, and further in view of U.S. Publication No. 2003/0171674 A1 to Jago, et al. ("Jago"). An appropriate

terminal disclaimer has been provided with the attached application to overcome the rejection. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection.

IV. Rejection of Claim 9 Double Patenting

Claim 9 stands rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of Robinson in view of Calderbank and Kommrusch, and further in view of U.S. Patent No. 6,664,921 B2 to Pratt ("Pratt"). An appropriate terminal disclaimer has been provided with the attached application to overcome the rejection.

Accordingly, Applicant's representative respectfully requests withdrawal of the rejection.

V. Rejection of Claims 10 and 11 Double Patenting

Claims 10 and 11 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of Robinson in view of Calderbank and Kommrusch, and further in view of U.S. Patent No. 6,128,470 to Naidu, et al. ("Naidu"). An appropriate terminal disclaimer has been provided with the attached application to overcome the rejection. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection.

VI. Rejection of Claims 34 and 37 Double Patenting

Claims 34 and 37 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 13 of Robinson in view of Calderbank. An appropriate terminal disclaimer has been provided with the attached application to overcome the rejections. Accordingly, Applicant's representative respectfully requests withdrawal of the rejections.

VII. Rejection of Claims 44, 48, 49 and 61 Under 35 U.S.C. §103(a)

Claims 44, 48, 49 and 61 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2004/0227683 A1 to Caimi, et al. ("Caimi") in view of U.S.

Publication No. 2003/0016771 A1 to Nuutinen, et al. ("Nuutinen") and Pratt. Withdrawal of the rejection is respectfully requested for at least the following reasons.

In rejecting claims 44, 48, 49 and 61, the Examiner relies upon the teachings of Caimi, filed Feb. 26, 2004. However, the filing date of the present application, Oct. 10, 2003, pre-dates the filing date of Caimi. Although Caimi claims the benefit of the filing date of related provisional and non-provisional applications, these applications fail to properly support the subject matter relied upon to make the rejection (See Caimi Par. [0001], provisional app. no. 60/450,191, non-provisional app. no. 10/066,937, and provisional app. no. 60/266,245). Specifically, the subject matter disclosed in FIG. 19, Pars. [0074] and [0079] of Caimi cannot be afforded the priority dates of the earlier applications claimed by Caimi because the specifications of these earlier applications fail to provide a written description of the invention in full, clear, concise and exact terms. *In New Railhead Mfg., L.L.C. v. Vermeer Mfg. Co.*, 298 F.3d 1290, 1294, 63, USPQ2d 1843, 1846 (Fed. Cir. 2002). Moreover, all of the applications from which Caimi claims priority fail to disclose a digital processing component that receives a digital representation of each analog signal and produces a control signal from each digital representation, representing an associated antenna, specifying the at least one frequency band containing the interfering signal as recited in claim 44. Accordingly, a rejection of claim 44 based upon Caimi is improper because the cited subject matter of Caimi cannot be considered prior art over the present application.

Even *assuming arguendo* that Caimi could be considered prior art, one of ordinary skill in the art would not be motivated to combine the stopband filters of Nuutinen with Caimi to create the system recited in claim 44. Specifically, Nuutinen discloses that it is advantageous that the received signal 620 or 622 is only filtered in one receiver (antenna) branch because this is how the information signal is lost as little as possible. Nuutinen Par. [0029]. Thus, Nuutinen teaches away from using multiple stopband filters in an antenna array because too much information signal may be lost if more than one stopband filter is used. Therefore, combining the stopband filter of Nuutinen with the systems disclosed in Caimi to create the system recited in claim 44 would be contrary to the common sense of one of ordinary skill in the art. Moreover,

the success of using multiple stopband filters in an antenna array, in light of the teachings of Nuutinen, would be an unexpected and surprising result because an ordinarily skilled artisan reading Nuutinen as a whole would expect too much signal loss from the combination proposed by the Examiner. Therefore, it would not be obvious to one of skill in the art to combine the systems disclosed in Caimi with the stopband filter of Nuutinen to create the system recited in claim 44. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 44.

Applicant's representative also respectfully requests withdrawal of the rejections of claims 48 and 49 at least for their dependence upon allowable claim 44. Additionally, Applicant's representative requests withdrawal of the rejection of claim 61, at least for its dependence upon allowable claims 56 and 57. Support for the patentability of claims 56 and 57 is provided *infra* at section XI of this response.

VIII. Rejection of Claim 50 Under 35 U.S.C. §103(a)

Claim 50 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Caimi in view of Nuutinen and Pratt as applied to claim 48, and further in view of U.S. Publication No. 2006/0072520 A1 to Chitrapu, et al. ("Chitrapu"). Claim 50 depends from claim 48, which depends from claim 44. Thus, claim 50 is patentable for at least the same reasons as claim 44. Moreover, in rejecting claim 50, the Examiner relies on Chitrapu solely for a purported teaching of a signal combiner comprising a frequency multiplexer (See Office Action, Page 18, citing 428 of FIG. 4 and Par. [0022] of Chitrapu). However, the addition of Chitrapu fails to make up for the aforementioned deficiencies of Caimi taken in view of Nuutinen and Pratt with respect to claim 44 and 48 from which claim 50 depends. Therefore, Caimi taken in view of Nuutinen and Pratt and further in view of Chitrapu does not make claim 50 obvious. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 50.

IX. Rejection of Claim 53 Under 35 U.S.C. §103(a)

Claim 53 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Caimi in view of Nuutinen and Pratt as applied to claim 48, and further in view of U.S. Publication No. 2005/0218984 A1 to Yin ("Yin"). Claim 53 depends from claim 48, which depends from claim 44. Thus, claim 53 is patentable for at least the same reasons as claim 44. Moreover, in rejecting claim 53, the Examiner relies on Yin solely for a purported teaching of a combiner comprising a bypass (See Office Action, Page 19, citing 216 of FIG. 2 and Par. [0050], lines 16-18 of Yin). However, the addition of Yin fails to make up for the aforementioned deficiencies of Caimi taken in view of Nuutinen and Pratt with respect to claim 44 and 48 from which claim 53 depends. Therefore, Caimi taken in view of Nuutinen and Pratt and further in view of Yin would not make claim 53 obvious to one of skill in the art. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 53.

X. Rejection of Claims 54 and 55 Under 35 U.S.C. §103(a)

Claims 54 and 55 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Caimi in view of Nuutinen and Pratt as applied to claim 48, and further in view of U.S. Patent No. 6,128,470 to Naidu, et al. ("Naidu"). Claim 54 depends from claim 48, which depends from claim 44. Thus, claim 54 is patentable for at least the same reasons as claim 44. Moreover, in rejecting claim 54, the Examiner relies on Naidu solely for a purported teaching of an analog-to-digital converter and the digital processing assembly being located at a first location, spatially remote from the first location and the first of a plurality of antennas being located at a second location spatially remote from the first location (See Office Action, Page 20, citing FIG. 2, col. 1, lines 43-50 and col. 2, lines 48-50 of Naidu). However, the addition of Naidu fails to make up for the aforementioned deficiencies of Caimi taken in view of Nuutinen and Pratt with respect to claim 44 and 48 from which claim 54 depends. Therefore, Caimi taken in view of Nuutinen and Pratt and further in view of Naidu would not make claim 54 obvious to one of skill in the art. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 54.

Claim 55 depends from claim 54, which depends from claim 44. Thus, claim 55 is patentable for at least the same reasons as claim 44. In rejecting claim 55, the Examiner also relies upon Naidu for a purported teaching that a second of the plurality of antennas is located at a third location, spatially remote from the first location and the second location (See Office Action, Page 20, citing FIG. 2, col. 1, lines 43-54 of Naidu). However, the addition of Naidu fails to make up for the aforementioned deficiencies of Caimi taken in view of Nuutinen and Pratt with respect to claim 44 and 48 from which claim 55 depends. Therefore, Caimi taken in view of Nuutinen and Pratt and further in view of Naidu would not make claim 55 obvious to one of skill in the art. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 55.

XI. Rejection of Claims 56-58 and 61 Under 35 U.S.C. §103(a)

Claims 56-58 and 61 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Caimi in view of Pratt. As stated in support of claim 44, Fig. 19 and Par. [0079] of Caimi cannot be considered prior art over the present application. Specifically, none of the applications from which Caimi claims priority provides support for the antenna array comprising an array of integrated assemblies 136A-136C each operative with one of a plurality of signal processors 146A-146C (See Office Action Pg. 21, citing FIG. 19, Par. [0079] of Caimi). Moreover, none of the applications relied upon by Caimi disclose a digital processing component that receives a digital representation of each analog signal, the digital signal representing an associated antenna and specifying the at least one frequency band containing the interfering signal as recited in claim 56. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 56.

Applicant's representative also respectfully requests withdrawal of the rejection of claims 57 and 58 at least for their dependence upon allowable claim 56. Additionally, Applicant's representative requests withdrawal of the rejection of claim 61, at least for its dependence upon allowable claims 56 and 57.

XII. Rejection of Claim 59 Under 35 U.S.C. §103(a)

Claim 59 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Caimi in view of Pratt as applied to claim 57, and further in view of Chitrapu. Claim 59 depends from claim 57, which depends from claim 56. Thus, claim 59 is patentable for at least the same reasons as claim 56. Moreover, in rejecting claim 50, the Examiner relies on Chitrapu solely for a purported teaching of a signal combiner comprising a frequency multiplexer (See Office Action, Page 24, citing 428 of FIG. 4 and Par. [0022] of Chitrapu). However, the addition of Chitrapu fails to make up for the aforementioned deficiencies of Caimi taken in view of Pratt with respect to claim 56 and 57 from which claim 59 depends. Therefore, Caimi taken in view of Pratt and further in view of Chitrapu does not make claim 59 obvious to one of skill in the art. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 59.

XIII. Rejection of Claim 60 Under 35 U.S.C. §103(a)

Claim 60 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Caimi in view of Pratt as applied to claim 57, and further in view of U.S. Patent No. 6,473,416 B1 to Lee ("Lee"). Claim 60 depends from claim 57, which depends from claim 56. Thus, claim 60 is patentable for at least the same reasons as claim 56. Moreover, in rejecting claim 60, the Examiner relies on Lee solely for a purported teaching of a signal combiner comprising a code division multiple access multiplexer (See Office Action, Page 25, citing 100 of FIG. 3 and col. 4, lines 39-41 of Lee). However, the addition of Lee fails to make up for the aforementioned deficiencies of Caimi taken in view of Pratt with respect to claim 56 and 57 from which claim 60 depends. Therefore, Caimi taken in view of Pratt and further in view of Lee does not make claim 60 obvious to one of skill in the art. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 60.

XIV. Rejection of Claim 62 Under 35 U.S.C. §103(a)

Claim 62 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Caimi in view of Pratt as applied to claim 57, and further in view of Yin. Claim 62 depends from claim 57, which depends from 56. Thus, claim 62 is patentable for at least the same reasons as claim 56. Moreover, in rejecting claim 53, the Examiner relies on Yin solely for a purported teaching of a combiner comprising a bypass (See Office Action, Page 26, citing 216 of FIG. 2 and Par. [0050], lines 16-18 of Yin). However, the addition of Yin fails to make up for the aforementioned deficiencies of Caimi taken in view of Pratt with respect to claim 57 and 56 from which claim 62 depends. Therefore, Caimi taken in view of Pratt and further in view of Yin does not make claim 62 obvious to one of skill in the art. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 62.

XV. Rejection of Claims 63 and 64 Under 35 U.S.C. §103(a)

Claims 63 and 64 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Caimi in view of Pratt as applied to claim 57, and further in view of Naidu. Claim 63 depends from claim 57, which depends from claim 56. Thus, claim 63 is patentable for at least the same reasons as claim 56. Moreover, in rejecting claim 63, the Examiner relies on Naidu solely for a purported teaching of an analog-to-digital converter and the digital processing component being located at a first location, and the plurality of antennas being located at a second location, spatially remote from the first location (See Office Action, Page 27, citing FIG. 2, col. 1, lines 43-50 and col. 2, lines 48-50 of Naidu). However, the addition of Naidu fails to make up for the aforementioned deficiencies of Caimi taken in view of Pratt with respect to claim 56 and 57 from which claim 63 depends. Therefore, Caimi taken in view of Pratt and further in view of Naidu does not make claim 63 obvious to one of skill in the art. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 63.

Claim 64 depends from claim 57, which depends from claim 56. Thus, claim 64 is patentable for at least the same reasons as claim 56. In rejecting claim 64, the Examiner also relies upon Naidu for a purported teaching that a second of the plurality of antennas being

located at a third location, spatially remote from the first location and the second location (See Office Action, Page 27, citing FIG. 2, col. 1, lines 43-54 of Naidu). However, the addition of Naidu fails to make up for the aforementioned deficiencies of Caimi taken in view of Pratt with respect to claim 56 and 57 from which claim 64 depends. Therefore, Caimi taken in view of Pratt and further in view of Naidu does not make claim 64 obvious to one of skill in the art. Accordingly, Applicant's representative respectfully requests withdrawal of the rejection of claim 64.

XVI. Rejection of Claims 51 and 52

The Examiner has failed to provide grounds for rejecting claims 51 and 52. Accordingly, Applicant's representative respectfully requests withdrawal of the rejections of claims 51 and 52 for this reason, in addition to their dependence on allowable claim 44.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

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/Christopher P Harris/

Christopher P. Harris
Registration No. 43,660

CUSTOMER NO.: 26,294

TAROLLI, SUNDHEIM, COVELL, & TUMMINO L.L.P.
1300 EAST NINTH STREET, SUITE 1700
CLEVELAND, OHIO 44114
Phone: (216) 621-2234
Fax: (216) 621-4072